Fw: LST - NOAA Risk Assessment for PCbs
Earl Liverman
to:
Richard Franklin
02/17/2011 12:31 PM
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----- Forwarded by Earl Liverman/R10/USEPA/US on 02/17/2011 12:31 PM ----
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From: Bruce Duncan/R10/USEPA/US
To: Earl Liverman/R10/USEPA/US@EPA
Date: 02/17/2011 12:28 PM
Subject: Re: Fw: LST - NOAA Risk Assessment for PCbs

I took a look - this has been an issue with the navy and some reef projects. Here is quick overview of one indicating that 50 ppm of low-risk
for leaching would be OK:
http://www.navsea.navy.mil/teamships/Inactiveships/Artificial_Reefing/facts
heets/ex-ORISKANY_Fact_sheet.pdf

leach rate from paint is pretty low relative to other sources:

Paint (AP). This sample was tested in a significantly different form than what is onboard
a typical vessel. It consisted of paint chips and particulates, rather than an intact painted
substrate. As a result, the surface area was artificially increased well beyond that found for most
paints onboard in a natural leaching scenario. Consequently, the leach rate study reports a higher,
conservative leach rate than would be expected in a natural setting or if an intact painted
substrate was tested in the laboratory. The as-tested sample of paint chips is a close approximation
for the minimal amount of loose, flaking paint that might become de-bonded
from the
substrate, although paint flakes are generally removed as part of vessel maintenance and
preparations. The type of paint tested in the leach rate study is similar to most types of interior
and exterior vessel paints, except for antifouling hull paint, which is not a PCB-containing

material found onboard Navy or commercial vessels. The leaching surface area to mass ratio
for most AP in its native state onboard a typical vessel is expected to be
significantly lower than
that tested in this study. This results in a much larger empirical AP leach rate than that expected
onboard a vessel in a realistic reef environment.
http://www.spawar.navy.mil/sti/publications/pubs/tr/1936/tr1936cond.pdf

The eco risk assessment showed:
a monotonically decreasing release rate that asymptotically approached steady state after about 2 yrs of leaching
http://environ.spawar.navy.mil/projects/reefex/Reports/ERA_FINAL_JANUARY_20
06.pdf

So, I think they can beef this up with the above citation that actually studied the issue. They may have other citations.

Thanks,

Bruce
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Bruce Duncan
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Ecological Risk Assessment
Climate Change Science Lead

From: Earl Liverman/R10/USEPA/US
To: Bruce Duncan/R10/USEPA/US@EPA
Date: 02/16/2011 03:18 PM
Subject: Fw: LST - NOAA Risk Assessment for PCbs

As discussed in my voicemail. What are your thoughts regarding the NOAH attachment found below. I believe its a good start but needs to be more substantive to meet the description of an EE/CA streamlined risk evaluation as described on page 29 and 30 of the following guidance attachment which was taken from the Guidance on Conducting Non-Time Critical Removal Actions Under CERCLA (EPA540-R-93-057). Please call me or Richard (503.326.2917).

[attachment "guidancepart2.pdf" deleted by Bruce Duncan/R10/USEPA/US]

Thank you.

----- Forwarded by Earl Liverman/R10/USEPA/US on 02/16/2011 03:12 PM ----
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From: Richard Franklin/R10/USEPA/US
To: Earl Liverman/R10/USEPA/US@EPA
Date: 02/16/2011 02:52 PM
Subject: LST - NOAA Risk Assessment for PCbs

[attachment "NOAH Risk LST1166 PCBs.docx" deleted by Bruce Duncan/R10/USEPA/US]

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